



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,449	06/29/2001	Jacob Oshins	40062.92USU1	9003
27488	7590	02/10/2004	EXAMINER	
MERCHANT & GOULD P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			PARDO, THUY N	
		ART UNIT	PAPER NUMBER	
		2175		
DATE MAILED: 02/10/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/895,449	OSHINS ET AL.
<b>Examiner</b>	<b>Art Unit</b>	
Thuy Pardo	2175	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 June 2001.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-29 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5)  Claim(s) \_\_\_\_\_ is/are allowed.  
6)  Claim(s) 1-29 is/are rejected.  
7)  Claim(s) \_\_\_\_\_ is/are objected to.  
8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 6/29/2004 is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 02

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5)  Notice of Informal Patent Application (PTO-152)

6)  Other: \_\_\_\_\_.

## DETAILED ACTION

1. Claims 1-29 are presented for examination.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-29 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Schelvis** U.S. Patent No. 5,241,673, in view of **Hagersten et al.** (Hereinafter “Hagersten”) US Patent No. 5,829,034.

As to claim 1, Schelvis teaches the invention substantially as claimed, comprising:  
detaching the identified object from the namespace while maintaining the identified object in a location in memory [inaccessible data occupying memory space is removed from memory to thereby free previously occupied memory space, ab];  
informing an operating system component that the device associated with the identified object is invalid [col. 12, lines 36-41]; and  
in response to a notification that the associated device is no longer being used, causing the identified object to be freed from the location in memory [ab; col. 12, lines 36-41].

Schelvis does not explicitly teach receiving a notification that an unload operation is starting, the unload notification identifying the object to be unloaded from the namespace. However, since Schelvis teaches reclaiming memory space occupied by dead objects, the feature of a notification that an unload operation is starting, the unload notification identifying the object to be unloaded from the namespace is inherent in the system in order to remove information from memory which has been determined to be inaccessible [see ab; col. 11, lines 1-2].

However, Schelvis does not explicitly teach identifying a device associated with the identified object as invalid. Hagersten teaches identifying a device associated with the identified object as invalid [col. 6, lines 33-42; col. 32, lines 1-23].

Therefore, it would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention to add this feature of Hagersten to the system of Schelvis in order to increase the efficiency of contributing to speedy operation.

As to claim 2, Schelvis and Hagersten teach the invention substantially as claimed. Hagersten further teaches prior to detaching the identified object, suspending power management and configuration management activity to put the namespace in a steady state; and after the identified object is detached from the namespace, resuming power management and configuration management activity [col. 9, lines 30-65].

As to claim 3, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches prior to detaching the identified object, locking access to the namespace;

and after the identified object is detached from the namespace, unlocking access to the namespace [col. 14, lines 63-67].

As to claim 4, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches that unload notification indicates that a hardware device associated with the object is being made unavailable [col. 14, lines 63-67].

As to claim 5, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches that the unload notification comprises means for indicating that the hardware device is being made unavailable [ab].

As to claim 6, Schelvis and Hagersten teach the invention substantially as claimed, with exception that the hardware device is being made unavailable comprises an interrupt. However, this feature is inherent in the system in order to make the hardware device unavailable.

As to claim 7, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches that the interrupt comprises a general purpose event signal [col. 29, lines 67 to col. 30, lines 11].

As to claim 8, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches that the general purpose event signal is generated by the device associated with the identified object [col. 29, lines 67 to col. 30, lines 12].

As to claim 9, Schelvis and Hagersten teach the invention substantially as claimed.

Hagersten further teaches severing a link between the identified object and the namespace and flagging another object in the namespace to indicate that the identified object has been served [col. 10, lines 6-27].

As to claim 10, Schelvis and Hagersten teach the invention substantially as claimed.

Schelvis further teaches maintaining a pointer to the location in memory in a device extension associated with the device [col. 4, lines 9-33].

As to claims 11 and 12, Schelvis and Hagersten teach the invention substantially as claimed. Schelvis further teaches that a reference count associated with the identified object has passed a predetermined threshold [title].

As to claim 12, Schelvis and Hagersten teach the invention substantially as claimed.

Schelvis further teaches that the predetermined threshold indicates that objects no longer refer to the device [col. 12, lines 25-35; col. 35, lines 28-66].

As to claims 13-24, all limitations of these claims have been addressed in the analysis of claims 1-12 above, and these claims are rejected on that basis.

As to claim 25-29, Schelvis and Hagersten teach the invention substantially as claimed as specified in claims 1-12 above. Schelvis further teaches AML interpreter [col. 4, lines 55 to col. 5, lines 4; col. 5, lines 46-67] and ACPI driver [inherent in the system].

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy Pardo, whose telephone number is (703) 305-1091. The examiner can normally be reached Monday through Thursday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

The fax phone number for the organization where this application or proceeding is assigned are as follows: (703) 872-9306 (Official Communication)

and/or:

(703) 746-5616 (*Use this Fax#, only after approval by Examiner, for “INFORMAL” or “Draft” communication. Examiner may request that a formal/amendment be faxed directly to then on occasions.*)

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

4. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Application/Control Number: 09/895,449  
Art Unit: 2175

Page 7

Washington, D.C. 20231

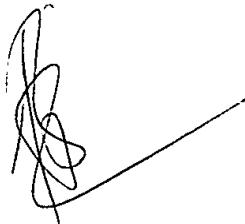
**or faxed to:**

(703) 308-9051, (for formal communications intended for entry)

**Or:**

(703) 308-5359, (for informal or draft communications, please label  
"PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal  
Drive, Arlington, VA., Sixth Floor (Receptionist).



Thuy Pardo  
February 07, 2004